

REMARKS

This amendment is responsive to the Office Action of December 11, 2009.
Reexamination and reconsideration of the application are respectfully requested.

The Office Action

Claim 1 stands objected to for an informality.

Claims 1–10 stand rejected under 35 USC §112, second paragraph.

Claims 1 stands rejected under 35 USC §103(a) as being unpatentable over pages 1–3 of the Specification in view of Fronk (US Patent No. 4,483,499).

Claims 2–10 stand rejected under 35 USC §103(a) as being unpatentable over pages 1–3 of the Specification and Fronk as applied to **claim 1**, and further in view of www.comco-ikarus.de/ (2003).

Claim Informality

Claim 1 has been amended to overcome the informality cited by the Examiner.

35 USC §112

The claims have been amended to overcome the Examiner's rejection stating that the claims are in narrative form and replete with indefinite and functional language.

Regarding the maximum take-off weight (MTOW) recited in **claim 1**, the claim is now clear that the aeroplane (the entire aeroplane structure) has a MTOW of between 452.5 kg and 590 kg. In fact, MTOW is an abbreviation and is internationally well-

known among pilots' communities and the airplane industry. The MTOW is the maximum weight an aeroplane (the entire aeroplane structure) must have for takeoff.

The Advisory Action states that in lines 4 and 5 of **claim 1**, the phrase "US Sport's Plane Category" has been added which creates a new issue requiring . However, Applicant points out that paragraph 1 of the application clearly discloses that the US Sport Plane Category refers to planes having a maximum take-off weight (MTOW) between 452.5 kg and 590 kg. In addition, **claim 1** as originally filed recited an aeroplane in the sport plane category with a MTOW of 452.2 kg to 590 kg. Therefore, the phrase "US Sport's Plane Category" does not create a new issue requiring an additional search and consideration.

In addition, **claim 1** now recites that the MTOW of between 452.5 kg and 590 kg is according to the US Sport's Plane Category regulations. In the European light airplane category, this weight is limited to 472.5 kg and in the US sports plane category it is 590 kg (see the attached printout from <http://www.zenithair.com/news/sport-pilot.html>). Therefore, these are very common and known regulations. It is very demanding to build an aircraft which remains below these weight limits and which at the same time offers such a spacious cabin (as recited in the claim). All other constructions and designs have far more narrow and shorter cabins.

Regarding the phrases "comprising a virtual flat cabin floor" and "comprising which does leave free an orthorhombic space," **claim 1** has been amended to recite "a space, limited on a lower side by a virtual flat cabin floor, that extends transversely beyond the square profile, in which the free remaining space above the virtual flat cabin floor presents an orthorhombic space of at least 190 cm in length, at least 45 cm wide, and at least 40 cm in height for receiving a person lying on a stretcher." The present construction provides a large space within that cabin so even a person in laying condition may be air-transported. In order to define this required space in technical terms, the claim recites an orthorhombic space with a minimum height, width and length. And this "virtual" space has at its bottom a "virtual" side or a "virtual" floor. In reality,

the actual lower side (floor) of these types of aeroplanes is not even (flat). A person on a stretcher must be able to be put into the cabin of the aeroplane (and the person and the stretcher must fit in the aeroplane). Although the actual floor may not be even, the virtual floor provides an even surface for the person to lay.

Regarding the Examiner's comment that the claims as amended do not positively define a space within a cabin, Applicant submits that the "space" recited in **claim 1** is in the recited "cabin cell."

For the reasons discussed above, all claims now meet the statutory requirements of 35 USC §112.

The Claims of the Present Application Distinguish Over the Cited References

Claim 1 recites an aeroplane of the ultra light class and sport plane category, having a maximum take-off weight (MTOW) of between 452.5 kg and 590 kg, according to US Sport's Plane Category regulations. The aeroplane includes a central tube, having at least a 200 mm diameter, extending along a longitudinal axis of the aeroplane. A space, limited on a lower side by a virtual flat cabin floor, has free remaining space above the virtual flat cabin floor presenting an orthorhombic space of at least 190 cm in length, at least 45 cm wide, and at least 40 cm in height for receiving a person lying on a stretcher for air-transporting of said person.

In the Office Action, the Examiner has pointed to the IKARUS C42. However, the C42 would definitely not allow a person to be transported in a laying condition. The cabin is only useful as a two seater and there is no room for a laying person—even if that would be the only person in the cabin. As noted in the response filed July 2, 2009, the "IKARUS C42 has a passenger cell that is **essentially too short**...for transporting a person in lying condition therein."

The aeroplane recited in **claim 1** provides a spacious cabin for allowing the transport of a person in a laying condition. Such construction is new and provides an aeroplane in this category for transporting a person in a laying position. Until now, there is no other plane of this category which allows for transporting a person in a laying position. If there is any other construction in this category of aeroplanes into which a laying person fits, it would only be for using the plane to sleep in it ON THE GROUND—never for flying with said laying person in it.

The Examiner points to Fronk as disclosing a cabin with room for at least two stretchers and seating to the side of the stretchers. Applicant points out that Fronk, along with many other aircraft, may provide room for a person to lie down or be transported in a lying condition. However, neither Fronk nor any other cited prior art reference discloses or suggests an aircraft of the very weight-limited and demanding category of the MTOW (e.g., Ecolights, Ultralights, or the US Sports Plane Category (SPC)) that allows the reception of a person lying on a stretcher for air-transporting of the person, as recited in **claim 1**.

Fronk discloses an entirely different airplane—certainly not a plane with a MTOW limited to 590 kg. In fact, Fronk discloses a multi-seat plane that easily must have a weight of several tons. Therefore, Fronk fails to disclose, or even suggest, an aeroplane having a maximum take-off weight (MTOW) of between 452.5 kg and 590 kg, according to US Sport's Plane Category regulations. Instead, Fronk discloses an entirely different airplane—a multi-seat plane that easily weighs several tons. In fact, Fronk states it is "used to temporarily convert an executive type airplane into a light cargo plane." Executive type airplanes are NOT planes having an MTOW between 452.5 kg and 590 kg. Instead, executive type airplanes have 6 or 8 (or more) seats, a table, etc. In addition, such a plane has an MTOW of several tons. Modifying Fronk to have an MTOW between 452.5 kg and 590 kg would render Fronk's plane inoperable. Providing a plane having an MTOW between 452.5 kg and 590 kg, and which has a cabin spacious enough for allowing the air-transport of a person in a lying position, is

extremely difficult and demanding—every ounce of weight matters. Applicant is not aware of any other such plane having an MTOW of 590 kg.

The present airplane recited in **claim 1** is the only airplane which receives a person on a stretcher into the cabin of the aeroplane in that particular definite category of airplanes.

For the reasons discussed above neither IKARUS C42 nor Fronk discloses or suggests an aeroplane of the ultra light class and sport plane category, having a maximum take-off weight (MTOW) of between 452.5 kg and 590 kg, according to US Sport's Plane Category regulations, or an aeroplane including a central tube, having at least a 200 mm diameter, extending along a longitudinal axis of the aeroplane, a space, limited on a lower side by a virtual flat cabin floor, having free remaining space above the virtual flat cabin floor presenting an orthorhombic space of at least 190 cm in length, at least 45 cm wide, and at least 40 cm in height for receiving a person lying on a stretcher for air-transporting of said person, as recited in **claim 1**. Therefore, **claim 1** and **claims 3–10**, which depend therefrom, are patentable over pages 1–3 of the Specification (IKARUS C42) in view of Fronk.

The www.comco-ikarus.de/ reference discloses a C42 aircraft. However, neither the www.comco-ikarus.de/ reference nor the C42 aircrafts discloses or suggests a cabin cell long enough or wide enough for accommodating an orthorhombic space of the dimensions recited in **claim 1**. Until now, it has seemed impossible to design an aircraft of the very weight-limited and demanding category of the MTOW (e.g., Ecolights, Ultralights, or the US Sports Plane Category (SPC)) that allows the reception of a person lying on a stretcher for air-transporting of the person, as recited in **claim 1**. Therefore, the www.comco-ikarus.de/ reference fails to overcome the deficiencies of pages 1–3 of the Specification or Fronk.

For the reasons discussed above, **claim 1** and **claims 3–10**, which depend therefrom, are also patentable over pages 1–3 of the Specification (IKARUS C42) in view of Fronk and www.comco-ikarus.de/.

CONCLUSION

For the foregoing reasons, it is submitted that the claims of the present application are in condition for allowance. Early notice thereof is respectfully requested.

It is believed that there is no fee associated with the filing and consideration of this amendment. Should the Commissioner decide that any fee or fee deficiency is due, the Commissioner is hereby authorized to charge any and all such fees, and/or credit any overpayments, incurred as a result of entering this amendment to Deposit Account No. 03-0172, Order No. 30887.04002.

Respectfully submitted,

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